भारत इलेक्ट्रॉनिक्स BHARAT ELECTRONICS भारत इलेक्ट्रॉनिक्स लिमिटेड

प्रति To, बीएसई लि . BSE Ltd. फिरोज़ जीजीबॉय टावर्स Phiroze Jeejeebhoy Towers दलाल स्ट्रीट Dalal Street मुंबई Mumbai – 400 001

सं .No. 17565/4/SE/MUMC/SEC दिनांक / Date: 17.09.2019

महोदय / महोदया , Dear Sir/Madam, (भारत सरकार का उद्यम, रक्षा मंत्रालय) पंजीकत कार्यालय:

पंजीकृत कार्यालय : आउटर रिंग रोड, नागवारा, बेंगलूर - 560 045, भारत

**Bharat Electronics Limited** 

(Govt. of India Enterprise, Ministry of Defence) Registered Office: Outer Ring Road, Nagavara, Bangalore - 560 045, INDIA. CIN: L32309KA1954GOI000787

टेलीफैक्स/Telefax : +91 (80) 25039266 ई-मेल/E-mail : secretary@bel.co.in वेब/Web : www.bel-india.com

विषय: 16 सितंबर, 2019 को विश्लेषकों की बैठक में दी गई प्रस्तुति।

Sub: Presentations Made at Analysts Meet held on 16<sup>th</sup> September, 2019.

हमारे पूर्व पत्र दिनांक 22 सितंबर, 2019 के क्रम में, कृपया 16 सितंबर, 2019 को आयोजित विश्लेषकों की बैठक में दी गई प्रस्तुति की प्रतिलिपि इसके साथ संलग्न पाएं। सेबी (एलओडीआर) विनियम, 2015 के प्रावधानों के अनुसार कंपनी की वेबसाइट पर भी इसे दिया गया है।

In continuation to our earlier letter dated 22<sup>nd</sup> September, 2019, please find enclosed herewith copy of the presentation made at Analysts Meet held on 16<sup>th</sup> September, 2019. The same is also being put on Company's website as per the provisions of the SEBI (LODR) Regulations, 2015.

सूचना व अभिलेख हेतु। This is for your information and record.

सधन्यवाद / Thanking you,

भवदीय Yours faithfully,

कृते भारत इलेक्ट्रॉनिक्स लिमिटेड

For Bharat Electronics Limited

एस श्रीनिवास S Sreenivas

कंपनी सचिव Company Secretary

संलग्न- उपरोक्तानुसार Encl: As stated above.



## **Overview**



#### **Navratna PSU**

- Established in 1954 under MoD
- R&D / Technology driven Company operating in competitive Defence Electronics area
- Manpower: 9612 Employees (as on 31.03.2019)

## Subsidiary & JVs

- BEL Optronics Devices Ltd
  - Night Vision Image Intensifier tubes
- GE BE Pvt Ltd
  - Medical Electronics Parts, X-Ray Tubes
- BEL Thales Systems Ltd
  - Civil ATM and select Defence Radars

## **Manufacturing Network**



# **Business Segments**















- 1. Radar
- 2. Missile System
- 3. Communication
- 4. Electronic Warfare & Avionics
- 5. Network Centric Systems
- 6. Anti submarine Warfare
- 7. Electro-Optics
- 8. Tank Electronics
- 8. Home Land Security
- 10 Civilian Products

Multi product, Multi technology company – Diverse product range

## Research & Development (R&D)



- 47% Engineering Manpower deployed in R&D
- R&D investment: Rs. 1077 Crs during 2018-19
- CMMi Level-5 Certification for Software development
- Largest Production Partner of DRDO
- Patents Application Filed 285, Patents Granted 08

Central Research Labs
(2 Centers)

Central Design Group and Product Development & Innovation Center (2 Centers)

Development & Engineering Groups (22 Centers)

#### Blue Sky Research (Futuristic Technologies)

(Radio Frequency & Microwave; Embedded Computing System; Radar Signal Processing; Communication (Software Defined Radio & Wireless); Network Centric Software; Sensor Signal Processing; Very Large Scale Integration, Smart Computing System; Networking; Sensor Data Fusion;

#### Core Technology Module development Groups

(Defence Software; Encryption; Radio Frequency; Microwave; Radar Signal Processing; Power Supply; Control Electronics, Embedded System; Computing Elements; Electro Optics, Communications)

Products & Systems development

# **R&D** Investment





2018-19







## **World Class Manufacturing & Test Facilities**

- Super Components Facility

  High Roof hangar for Radar & Antenna Integration
- Test set up for missile system

  6 Modern Production setup for Airborne applications
- 3 Secured manufacturing facility for EVM/ VVPAT 7 Near Field Test Range and EMI/EMC Test Facility
- 4 Antenna test range facility

  New factories planned at Devanahalli & Machilipatnam



## **Exports**









- Dedicated Business Unit & Marketing
  Group for Exports
- Achieved USD 21.6 Million during 18-19
- Export Initiatives:
  - Strategic alliances with global OEMs (Elbit, IAI, Thales, SAAB) for joint development / co-production
  - Focus on SE Asian Countries for Comn,
     Sonars and Coastal Security solutions
  - Established Marketing offices in Vietnam, Myanmar, Sri Lanka, Oman, USA and Singapore.

#### Major products exported:

- Coastal Surveillance System, CoMPASS, Advanced Composite Communication System, Electro Mechanical parts etc.
- Major countries:
  - USA, UK, Russia, Italy, Myanmar, Brazil,
     Germany, France, Israel, Indonesia,
     Honduras, Malaysia, Maldives, Mauritius,
     Namibia, Seychelles, South Africa











**Voter Verifiable Paper Audit Trail** 

# **Major Orders Executed in 2018-19**





# Ground based Mobile Electronic Intelligence System





Low Intensity Conflict Electronic Warfare System (LIC EWS)







Schilka Upgrade



**TROPO Upgrade** 

## L70 Gun Upgrade



## **New Products Introduced in 2018-19**



- Real Time Information System for Indian Railways
- Auto Fare Collection Gate (SWAGAT)
- Drone Guard System
- EO System for Home Land Security
- Integrated Communication System for Indian Navy
- Coastal Surveillance System for Seychelles
- Fire Control System
- Image Intensifier based Passive Night Vision Devices
- Indigenous Electronic upgrade for 52 Calibre Gun

## **New Products Introduced in 2018-19**



- Corner Shot Weapon System
- Target Acquisition System for Man Portable Anti-Tank Guided Missile (MPATGM)
- IFF System for MRSAM Phase II
- Virtual Reality Simulator
- Electric motor for T-90 Tank Stabilizer
- Battery Multi-Function Radar vehicle and Battery Surveillance Radar Vehicle for Missile System
- Ku Band RF Seeker

#### **Order Book**



## **Major Orders Received during 2018-19**

- Long Range Surface to Air Missile for P17A
- Smart City Business North East States & Agra, Integrated perimeter Security System (IPSS) for Air Force, Kerala Fibre Optic Network (K-Fon)
- Home Land Security System (Naval Airfield Integrated Security System (NAISS))
- Naval Equipments (War Reserves)
- Setting up of Weapon Repair Facility at Naval Shipyard
- Upgradation of Shikari/Lynx Fire Control systems

Orders Received current year is around Rs. 9000 Cr, including Akash Order of Rs. 5350 Cr.. The current Order Book is around Rs. 57600 Cr..





- Integrated Air Command & Control System
- LRSAM (Long Range Surface to Air Missile)
- Smart City Business
- Upgrade of Communication Equipment
- Ground Based Mobile Electronic Intelligence System
- Naval Equipment
- Radars
- Avionics Package for LCA
- Low Intensity Conflict Electronic Warfare System
- Delhi CCTV

#### **Business Initiatives**



- Expansion of geo-spatial reach, full scale operationalization of Overseas Marketing Offices in Vietnam, Myanmar, Sri Lanka and Oman. Singapore and New York offices expanded with marketing cell.
- Regional Product Support Centers made operational at Tennew locations.
- BEL acquired land for diversification in Bengaluru, Bhatinda & Jodhpur.
- MoUs signed with potential Strategic Partners for Platforms (L&T, Adani, Mahindra Defence, Bharat Forge)
- Dedicated Business verticals for RF Seekers, Software as a Service.
- Make-II implementation in BEL Purchase Procedure.

#### **Business Initiatives**



- BEL-Bengaluru received prestigious "Business Excellence Award" and "Role Model Organization" recognition from jury of CII EXIM Bank Award for Business Excellence. Other BEL Units, namely Ghaziabad, Chennai and Machilipatnam received Platinum level recognition.
- Three of our Units bagged the CII TCM awards
- Product Development & Innovation Centre became operational.
- Engagement with Start-ups for emerging/disruptive technologies.
- Operationalization of Defence Innovation Organization (DIO);
   a Section-8 company jointly created by BEL & HAL.
- Green Channel Certification from DGQA for Radar Spares.
- Operationalization of BEL Academy for Excellence (Nalanda).

## 'Make in India' Initiatives



- BEL is focusing more on core areas and R&D to retain IP, all non-core areas are being outsourced to Indian Industries including MSMEs
- Outsourcing and Vendor Development Policy has been released

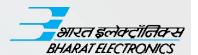


- Make-II Procedure has been implemented with effect from 27.08.2019
- "Make in India" Display Cells established in all Units of BEL
- Nodal officers for Outsourcing & Vendor development nominated
- Complied with Public Procurement Policy
- BEL's Test facilities are being provided to Private vendors

## **Outlook for the Future**



- BEL to focus on in-house R&D for increased value addition.
- Thrust on Exports by expanding geo-spatial reach & partnerships.
- Diversify in non-defence opportunities to drive BEL's growth.
- Focus areas: Space Electronics, Solar, Homeland Security, Smart Cards, Telecom, Railways, Civil Aviation, Software as a Service, Fuel Cells, Li-ion Batteries.
- Creation of Centres of Excellence (CoE) in R&D & Innovation Cell in IITM.
- Operationalization of new plants at Nimmaluru for advanced Electro-Optics and Anantapur for Missile & Seeker businesses.
- Focus on Artificial Intelligence based projects and Indigenization.



March Gove





## **Financial Highlights 2018-19**

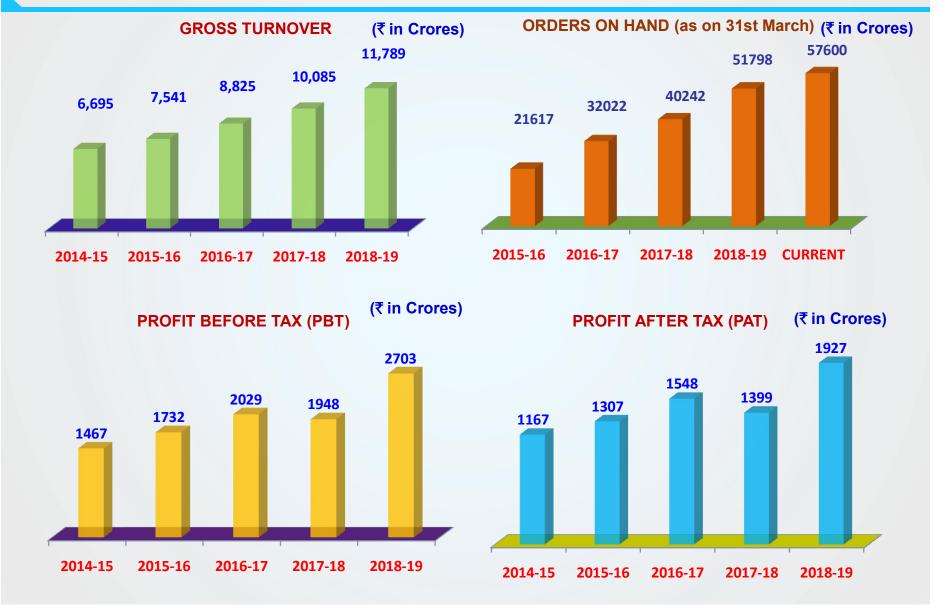
- ➤ Turnover has increased from ₹ 10084.84 Crores in 2017-18 to ₹ 11789.22 Crores in 2018-19, a growth of 16.90%.
- Profit Before Tax (PBT) has Increased from ₹ 1947.84 Crores in 2017-18 to ₹ 2703.19 Crores in 2018-19, an increase of 38.78%.
- Profit After Tax (PAT) has Increased from ₹ 1399.29 Crores in 2017-18 to ₹ 1927.29 Crores in 2018-19,an increase of 37.73%.
- PBT to Turnover Ratio has Increased from 19.31 % in 2017-18 to 22.93 % in 2018-19.
- Earning Per Share (EPS) has increased from ₹ 5.70 in 2017-18 to ₹ 7.91 in 2018-19.



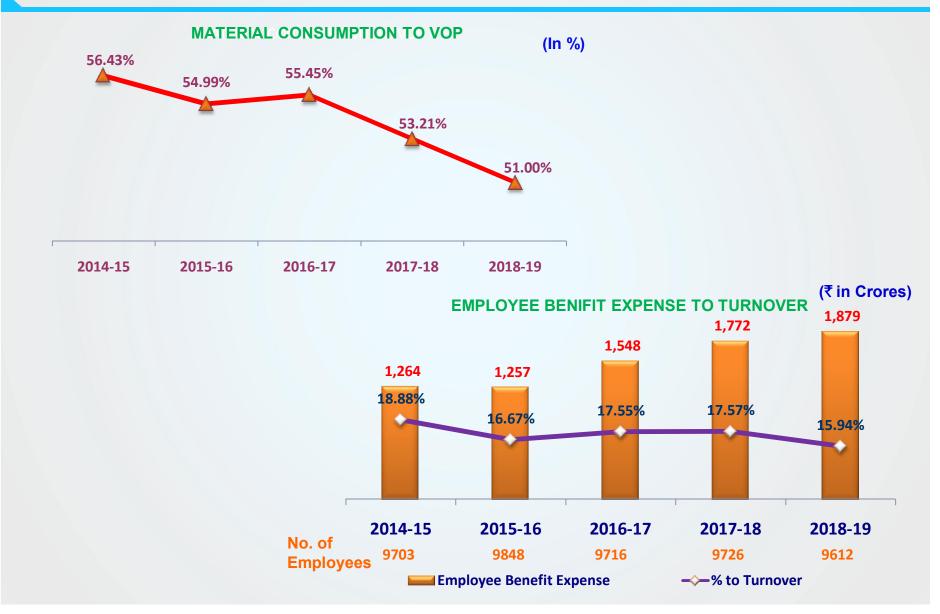
## **Financial Highlights 2018-19**

- Total dividend payout of ₹ 3.40 per share against ₹ 2.00 per share for 2018-19. The total dividend outlay for 2018-19 is ₹ 828.44 Crores (including Dividend distribution tax ₹ 998.72 Crores).
- Book Value Per Share has Increased from ₹ 31.85 in 2017-18 to ₹ 37.01 in 2018-19.
- Net worth has Increased from ₹ 7761.01 Crores in 2017-18 to ₹ 9018.9 Crores in 2018-19.
- Highest Capital Expenditure amounting to ₹ 673.59 Crores in 2018-19.
- R&D expenditure was 9.14 % of Turnover during the year 2018-19 against 9.79 % of previous year.



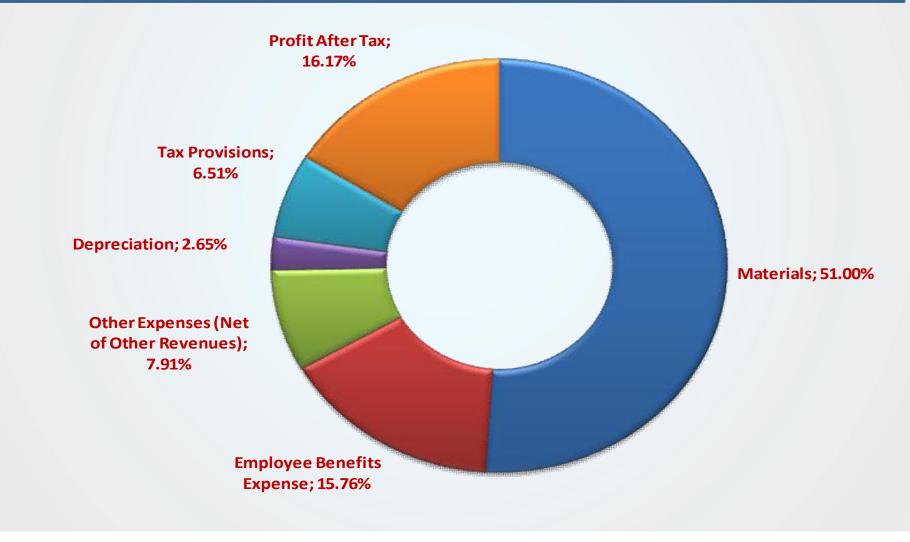




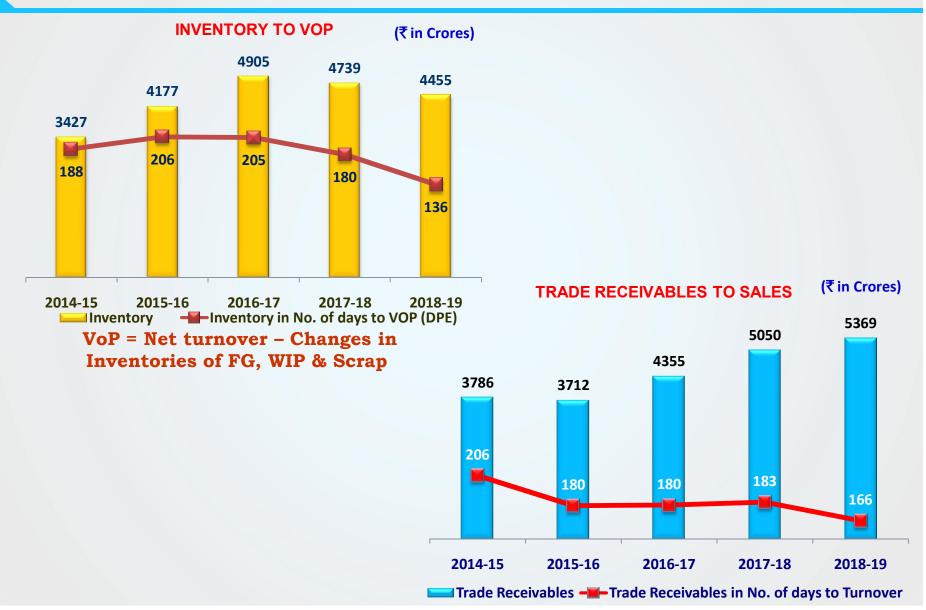




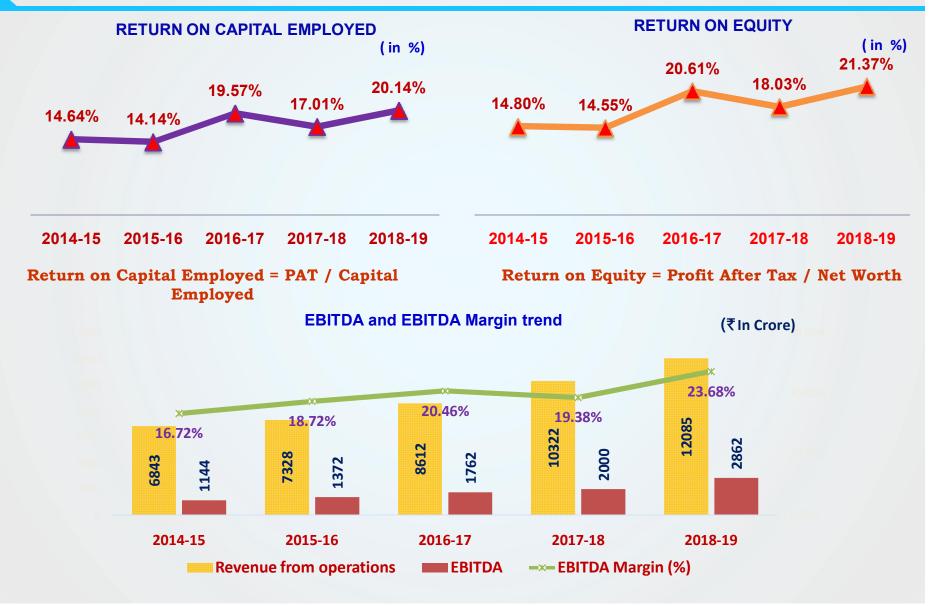
## 2018-19 HOW A RUPEE EARNED IS DISTRIBUTED



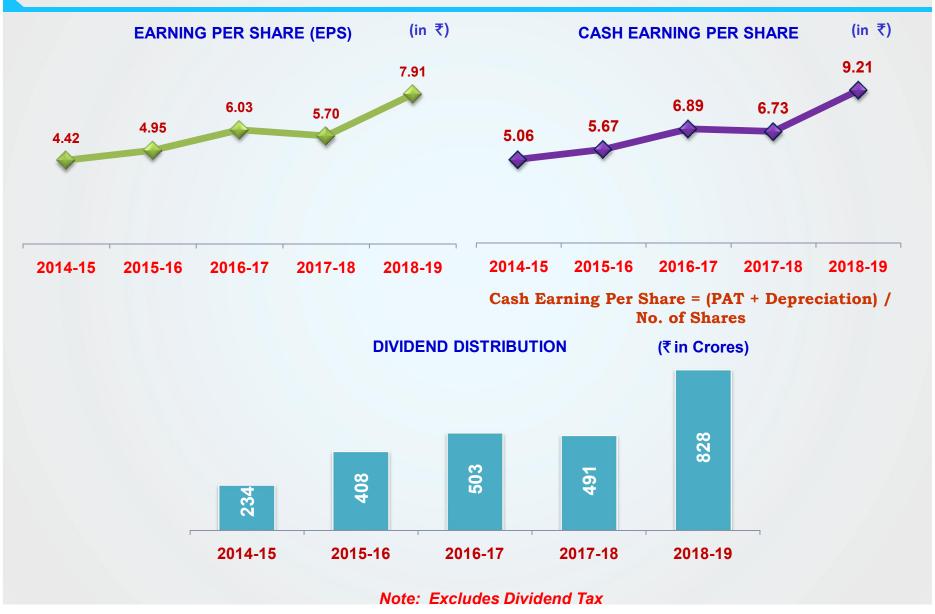




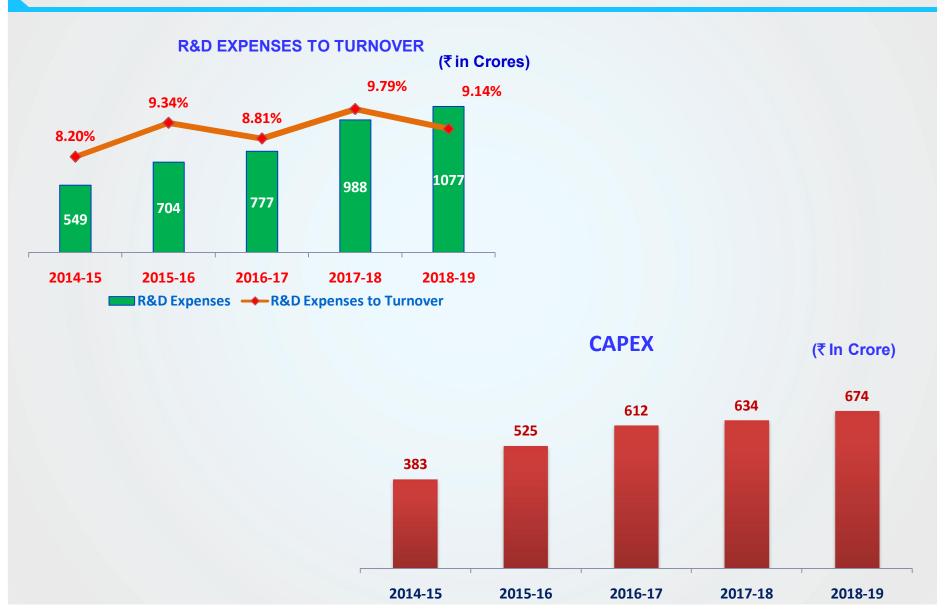




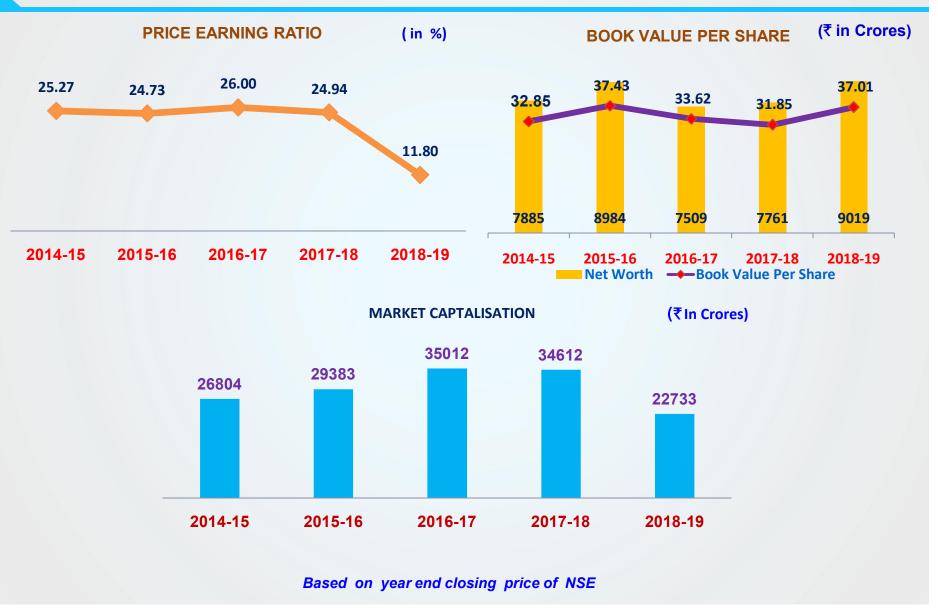






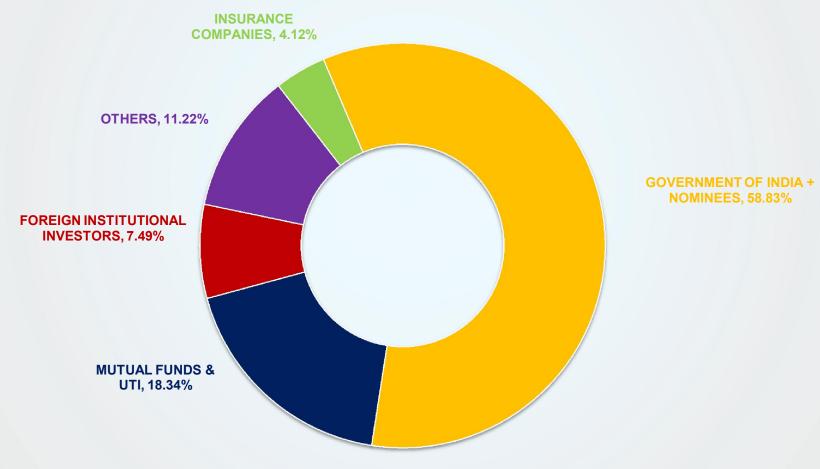








#### **SHARE HOLDING PATTERN AS ON 31.03.19**



Others includes: Corporate Bodies(2.75%),NRI's(.58%),Banks & FI's(.41%)



# **QUARTERLY PERFORMANCE**



# Financial Highlights for 1<sup>St</sup> Quarter 2019-20 (₹ in Crores) **Particulars** 2018-19 2019-20 Total Income from Operation (Net) 2041.98 2077.84 Profit for the period before tax (PBT) 290.39 250.21 Profit for the period after tax (PAT) 204.73 179.73 Earning Per Share (EPS in ₹) 0.84 0.74



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